23. Tests

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Summary

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Build directory

Build directory is the place where platform/configuration dependent files (including built libs and programs) are stored. It is placed in C++ directory tree and looks like:

```
WorkShop6-Debug
```

or

```
GCC-Release
```

etc.

When we mention build directory here, it means subdirectory *build* in the above directory.

Updating ASN.1 modules from C Toolkit

In the updated C++ directory tree:

- `cd src/objects`
- `./update_asn.sh`

The script will report either

```
ASN.1 modules were unchanged
```

or

```
ASN.1 modules were updated, run 'cvs update'
```

In latter case you should run:

- `cvs update`

and C++ ASN.1 module files will be copied from C Toolkit. Now you shouldregenerate C++ objects.

Regenerating C++ objects from ASN.1 modules

You should have built datatool in your build directory. In the build directory:

- `cd objects`
- `make all_r`

This command will run datatool for every ASN.1 module and then rebuild objects libraries. It will also build asn2asn - test program.

Updating C++ objects sources

Sometimes you can find errors from CVS while updating objects sources e.g.:

```
cvs: move away Object_id.cpp; it is in the way
```

This usually means that this file was added by somone else while you have this file generated by datatool. If you didn't modify the file (make sure), you can simply remove it and run update again. CVS will get new copy of file from repository. If it happens that you also made some changes to this file, you have to add your changes again: make backup copy your file, remove it, run update again, then make the same modifications to new file as you did before.

Commiting changed C++ objects sources

If you have modified some of wrapper classes for objects, you might need to save your changes in CVS repository. Your modified files possibly was not added to CVS yet. This can be checked by running '`cvs commit`' command for every file you've modified. If file was not added to repository yet, you'll get error message:

```
cvs commit: nothing known about `Date.cpp'
```

In this case you should run '`cvs add yourfile`' and commit it again.

Building datatool program

You should have built `corelib` in your build directory. In the build directory:

- `cd serial`
- `make all_r`

This will build serial library and datatool program.

Building relevant libraries

In the build directory:

- `cd corelib`
- `make all`

In the build directory:

- `cd util`
- `make all`

Testing datatool program

After building datatool you can test its proper operation by special script. From the build directory:

- `cd serial/datatool`
- `./datatool.sh`

If everything was fine this script will print at the end:

```
Done!
```

Testing asn2asn program

After building objects you can test its proper operation by special script. From the build directory:

- `cd objects/asn2asn`
- `./asn2asn.sh`

If everything was fine this script will print at the end:

```
Done!
```